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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/198,779	11/24/98	BLEDIG	S 04983.0002US

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EXAMINER	
MARSCHEL, A	
ART UNIT	**PAPER NUMBER**
1631	5

DATE MAILED: 03/22/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/198,779	Bledig et al.
Examiner	**Group Art Unit**
Ardin Marschel	1631

☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 1 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-11 is/are pending in the application

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☐ Claim(s) _____ is/are rejected.

☐ Claim(s) _____ is/are objected to.

☒ Claims 1-11 are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

☒ Raw Sequence Listing Error Report

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR § 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR § 1.821 through 1.825 because of errors that are listed on the enclosed RAW SEQUENCE LISTING ERROR REPORT. Applicants are required to submit a new sequence listing both in paper and computer readable form as well as a new statement under 37 CFR § 1.821(f). Applicants are also reminded that a CD-ROM sequence listing submission may replace the paper copy submission by Petitioning under 37 CFR § 1.183 to waive the requirements of 37 CFR §§ 1.2, 1.52, and 1.821(c), and modify the requirements under 37 CFR § 1.821(f) to accept a portion of the above-identified application on CD-ROM. If applicants choose to do so, certain conditions for such submission(s) apply and a detailed explanation of said conditions may be requested if desired. Applicants are given the same response time regarding this failure to comply as that set forth to respond to this office action. A complete response to this office action includes compliance with this sequence rule compliance requirement. Failure to comply may result in abandonment of this application.

Restriction/Election Requirement

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

I. Claims 1 and 2, drawn to nucleic acid molecules, classified in Class 536, subclass 23.1. If this group is elected, then the below sequence election requirement also is required.

II. Claims 3 and 4, drawn to enzymes or fragments thereof, classified in Class 530, subclasses 300 and 350. If this group is elected, then the below sequence election requirement also is required.

III. Claim 5, drawn to antibodies or fragments thereof, classified in Class 530, subclass 387.1. If this group is elected, then the below sequence election requirement also is required.

IV. Claims 6, 7, and 11; drawn to a transformed plant and methods of producing same, classified in Class 800, subclasses 278 and 295. If this group is elected, then the below sequence election requirement also is required.

V. Claims 8-10, drawn to methods of determining a level or pattern in a plant cell of an enzyme or mutation therein based on polynucleotide hybridization, classified in Class 435, subclass 6. If this group is elected, then the below sequence election requirement also is required.

Sequence Election Requirement Applicable to All Groups:

In addition, each Group detailed above reads on patentably distinct sequences. Each sequence is patentably distinct because

they are unrelated sequences, and a further restriction is applied to each Group. For an elected Group drawn to amino acid sequences, the Applicant(s) must further elect a single amino acid sequence. For an elected Group drawn to nucleic acid sequences, the Applicant(s) must elect a single nucleic acid sequence (See MPEP 803.04).

MPEP 803.04 states:

"Nucleotide sequences encoding different proteins are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute independent and distinct inventions with the meaning of 35 U.S.C. 121. Absent evidence to the contrary, each such nucleotide sequence is presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. 121 and 37 CFR 1.141 et seq."

It has been determined that 1(ONE) sequence constitutes a reasonable number for examination purposes under the present conditions. At present the huge number of submissions of claims directed to various sequences, such as nucleic acids or polypeptides, is so large that the election of 1(one) sequence of this type is now deemed to be practically appropriate so as to not overwhelm the examination and search processes regarding such claims.

Examination will be restricted to only the elected sequence.

The invention Groups are distinct, each from the other because of the following reasons:

The inventions of Groups (I, IV, and V); Group (II); and Group III are independent inventions because they are directed to different chemical types regarding the critical limitations therein. For Group II the critical feature is an enzyme or polypeptide; for Groups I, IV, and V the critical feature is nucleic acids; and for Group III the critical feature is an antibody. It is acknowledged that various processing steps may cause a polypeptide of Groups II to be directed as to its synthesis by a polynucleotide of Groups I, IV, or V, however, the completely separate chemical types of the inventions of the nucleic acid, polypeptide, and antibody Groups supports the undue search burden if both were examined together. Additionally, polynucleotides, polypeptides, and antibodies have been most commonly, albeit not always, separately characterized and published in the Biochemical literature, thus significantly adding to the search burden if examined together as compared to being searched separately. Also, it is pointed out that processing that may connect two Groups does not prevent them from being viewed as distinct because enough processing can result in producing any composition from any other composition if the processing is not limited as to additions, subtractions, enzyme action, etc. Thus, the three Groupings of (I, IV, and V); (II); and (III) are independent and/or distinct invention types for

restriction purposes.

The inventions of Group I, IV, and Group V are related as product and distinct product or process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. § 806.05(h)). In the instant case the nucleic acids of Group I can be used in the distinct processes of the inventions of Groups V as well as for the expression of enzyme or polypeptides, or, alternatively, for antisense practice. One use is directed to polypeptide expression and the other to screening via nucleic acid hybridization reactions and another for inhibition of expression thus documenting the many alternative distinct uses that separate Groups I and V. Another use is to transform a plant to result in the invention of Group IV as another distinct use over the others listed above. Such a use and product made thereby would require an undue search burden over the other uses and compositions noted above and thus supports the restriction within Groups I, IV, and V into separate and distinct inventions as summarized above.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR § 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703)308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703)308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (703)308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to Patent Analyst, Tina Plunkett, whose telephone number is (703)305-3524 or to the Technical Center receptionist whose telephone number is (703) 308-0196.

March 20, 2001

ARDIN H. MARSCHEL
PRIMARY EXAMINER